



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2009/2010

**FIRST SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF
FOODS NUTRITION AND DIETETICS**

HFN 511: ADVANCED THERAPEUTIC NUTRITION

DATE: Thursday, 26th November, 2009

TIME: 9.00 a.m. – 12.00 p.m.

INSTRUCTIONS:

Answer question **ONE** and any other **TWO** questions.

QUESTION ONE

Mr. Smith just found out that he has diabetes Mellitus (NIDDM). He is sedentary, 40 years old man who is 170cm tall and weighs 94kgs. No medications were prescribed to Mr. Smith.

- a) What is Mr. Smith's ideal body weight range" (1 mark)
- b) A 1,900 kilocalories diet was prescribed. How many grams of carbohydrate, protein and fat should he consume? (6 marks)
- c) What exchanges of Carbohydrates, protein and fat should be planned in his diet in a day? (6 marks)
- d) What are the goals and aims of nutritional advice for Mr. Smith's medical condition? (5 marks)
- e) Briefly explain the classification of Diabetes Mellitus (DM) (2 marks)

QUESTION TWO

Discuss the three main types of Renal Replacement Therapy (RRT) (20 marks)

QUESTION THREE

JK is a 48-year old man referred for treatment of obesity. His primary care provider recently told him that he now has borderline hypertension, which he states has motivated him to seek help. He is 170cm and weighs 111 kg. JK states that when he was 18 years old he weighed 85 kg, maintained a weight of about 90 kg until age 30, after which he has been gradually gaining. He has tried to reduce his intake on his own several occasions and bought a popular diet book of which he read 15 pages. He has thus far been unable to reduce his weight by more than 2 kg, after which he regains. JK works as a computer programmer and spends most of the day sitting at a computer. He states that he usually skips breakfast, eats a small lunch, but consumes a very large dinner in the evening followed by sweets. He drives to work and has little recreational activity. His physical exam is remarkable for blood pressure of 154/92 mmHg and a waist circumference of 43 inches. Lab tests are remarkable for total cholesterol of 232 mg/dL and low density lipoprotein cholesterol of 161 mg/dL, but are otherwise normal.

- a) What levels of energy and protein are appropriate for JK, and what is the appropriate medical monitoring? (8 marks)
- b) What advice could be given regarding successful maintenance of lost weight? (6 marks)
- c) Define the current classification of overweight and obesity (6 marks)

QUESTION FOUR

Discuss the effects of alcohol abuse in nutritional status and the prevalence of malnutrition in liver cirrhosis (20 marks)